

EB 1437

1995 Crop Rotation Budgets for
Eastern Whitman County, Washington

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Note

Enterprise costs and returns vary from one farm to the next and over time for any particular farm. Variability stems from differences in the following:

- Capital, labor, and management resources
- Type and size of machinery complement
- Cultural practices
- Size of farm enterprise
- Crop yields
- Input prices
- Commodity prices

Costs can also be calculated differently depending on the intended use of the cost estimate. The information in this publication serves as a general guide for a modern, well-managed grain farm in eastern Whitman County. To avoid drawing unwarranted conclusions about any particular farm or group of farms, the reader must closely examine the assumptions used. If they are not appropriate for the situation at hand, adjustments in the costs and/or returns should be made.

Acknowledgments

The authors would like to thank the numerous farmers and employees of various farm supply companies whose assistance was vital to the production of these budgets.

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Kathleen Painter, Herbert Hinman and John Burns*

INTRODUCTION

This publication presents projected costs and returns for six rotations plus a set-aside/ summer fallow budget for the 18- to 23-inch rainfall annual cropping region of eastern Whitman County. These rotations include:

- winter wheat/spring barley/spring peas (WW-SB-SP)
- winter wheat/spring barley/spring lentils (WW-SB-SL)
- winter wheat/soft white spring wheat/spring peas (WW-SW-SP)
- winter wheat/soft white spring wheat/spring lentils (WW-SW-SL)
- winter wheat/dry peas (WW-SP)
- winter wheat/spring lentils (WW-SL)
- set-aside or summer fallow (SF)

Producers, agricultural lenders, and others in the agribusiness community should find this information helpful in identifying enterprise strengths and weaknesses, planning production adjustments, determining financial requirements, making marketing decisions, and resolving other business management problems.

The budgets do not represent a particular farm. Instead, they represent costs and returns under the specific assumptions adopted for the study. We recommend that individual growers use the blanks provided on the right-hand side of various budgets to estimate their own costs and returns. Also, local Cooperative Extension agents and field personnel should be consulted for specific recommendations on field operations and operating inputs.

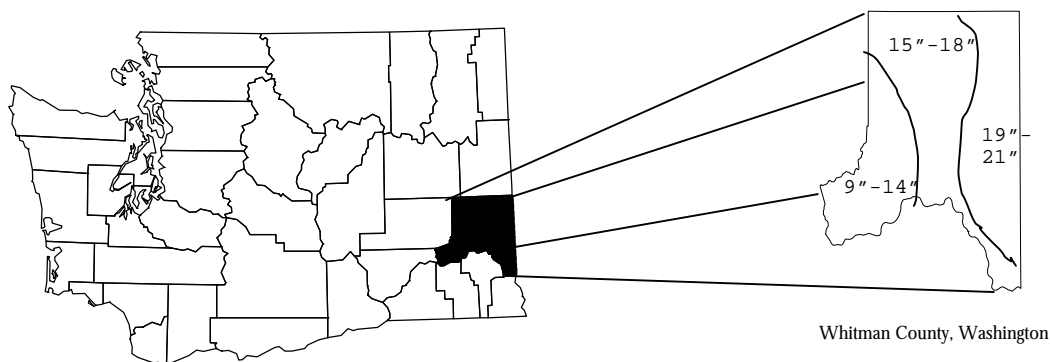


Figure 1. Rainfall Regions for Whitman County, Washington

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SOURCES OF INFORMATION

A group of experienced grain growers from the 18- to 23-inch rainfall area of Whitman County identified field operations, machinery, and inputs commonly used on well managed operations. Local farm suppliers were contacted to obtain current price information on materials and services. Machinery costs were based on replacement prices and on typical rates of annual use.

BUDGET ASSUMPTIONS

The following assumptions were used in developing the enterprise budgets:

Farm Size

These budgets are based on an average farm size of 1,500 acres for the 18- to 23-inch rainfall zone in eastern Whitman County. Farms that deviate from this average may have different costs of production due to changes in the machinery use or complement and volume pricing on inputs.

Yields

Expected yields, listed below, are based on elevator survey information for eastern Whitman County, farmer survey data, and county statistics. These yields are representative of a well-managed farm in the 18- to 23-inch rainfall zone in eastern Whitman County.

Winter wheat	75 bu/acre
Spring barley	1.75 tons/acre
Soft white spring wheat	50 bu/acre
Dry peas	20 cwt/acre
Lentils	12 cwt/acre

Yield variability is common in this region and can have substantial impact on net returns.

Crop Prices

Crop prices used in this report are the Washington State marketing year averages for 1989-90 through 1993-94. Nearly all producers in this area participate in the government commodity programs for wheat and barley, so government deficiency payments are added to the market prices for these crops. Farmers receive deficiency payments based on the proven yield for their farm. Proven yield is assumed equal to current expected yield, although a particular farmer's proven yield may no longer reflect current production since proven yields were frozen at 1985 levels. For this bulletin, average 1990-1994 deficiency payments and set-aside levels are used. The permitted base reflects the 15% reduction for the mandatory flex provision in the 1990 Farm Bill less the mandated set-aside amount. The crop prices for wheat and barley in this bulletin are calculated using the following formula:

$$\begin{aligned} &\text{Price received for program crops} = \text{average market price} \\ &+ (\text{deficiency payment})(\text{permitted base \%}) - \text{transportation cost.} \end{aligned}$$

The marketing year average Washington State price for 1989-90 through 1993-94 was \$3.50 per bushel for wheat and \$89.42 per ton for barley. Deficiency payments have averaged \$1.01 per bushel for wheat and \$21.67 per ton for barley for 1990-1994. Over this same 5-year period, set-aside averaged 5% for wheat and 5% for barley. Transportation costs are assumed to be \$0.46 per bushel for wheat and \$18 per ton for barley. Due to large fluctuations in the prices for peas and lentils during this time period, average returns are calculated using the below listed prices plus the range of prices listed in Table 6.

Winter wheat.....	\$ 3.85/bu
Spring barley.....	88.68/ton
Soft white spring wheat	3.85/bu
Dry peas	8.94/cwt
Lentils	18.40/cwt

Labor Costs

Labor, including social security and labor and industrial payments, whether it represents hired labor or owner-operator labor, is valued at \$10.00 per hour.

Land Tax

The average land tax for this region is estimated to be \$5.00 per acre.

Insurance

Premiums for hail and fire protection are calculated on the expected value of the crop. The premium is \$1.00 per \$100 of crop value insured for wheat and barley, \$1.70 per \$100 of crop value insured for lentils and \$1.40 per \$100 of crop value insured for dry peas. This type of insurance is popular among farmers as it covers any crops losses greater than 5%.

To participate in government farm programs, producers must purchase a minimum amount of multi-peril crop insurance. This minimum coverage costs \$50 per crop per county. Since this is a relatively small per-acre cost, it is included in the overhead cost.

Interest Costs

The effective annual interest rate on operating capital and machinery is 10.25%. This interest rate represents both the direct cost of borrowed operating capital and the rate of return foregone on equity capital that could have been earned had it been invested elsewhere.

Overhead Costs

Overhead costs cover such items as shop cost, utilities, telephone, legal and accounting fees, and the minimum requirement of multi-peril crop insurance. They are estimated to be 5% of total variable costs.

Fertilizer Applicators and Herbicide Sprayers

A rented ripper-shooter is used for fertilizing winter wheat in order to preserve residue on the vulnerable winter wheat seedbeds. The charge for this rental is \$2.50 per acre. For grain crops other than winter wheat, a 45-foot applicator is supplied at no charge by the fertilizer company. An 80-foot sprayer is used for pesticide applications at a rental rate of \$1.50 per acre exclusive of material cost.

Net Rent

The typical lease agreement for wheat and barley in Whitman County is one-third landowner and two-thirds lessee crop share, with the landowner paying land taxes plus one-third of the fertilizer and crop insurance expenses. The lessee covers all other production expenses. The landowner receives one-third of the crop returns, including deficiency payments, as estimated by the average expected price defined earlier. Net rent for wheat and barley, presented in Table 1, is estimated by the following formula:

$$\text{Net Rent} = 1/3 \text{ expected crop revenue} - 1/3 \text{ crop insurance expense} \\ - 1/3 \text{ fertilizer expense} - \text{land tax}$$

No rent is charged for set-aside or summer fallow land. As this is an annual cropping region, land is rarely left fallow except to meet set-aside requirements.

The typical lease agreement for dry peas and lentils in this region is one-fourth landowner and three-fourths lessee crop share, with the landowner paying land taxes plus one-fourth of crop insurance expense. The lessee covers all other production expenses. Net rent for dry peas and lentils, presented in Table 2, is estimated by the following formula:

$$\text{Net Rent} = 1/4 \text{ expected crop revenue} - 1/4 \text{ crop insurance expense} - \text{land tax}$$

Table 1: Net Rent Calculations for Sharecropping Grain Crops (\$/Acre)

	One-Third Crop Revenue (1)	Land Tax (2)	One-Third Expenses ¹ (3)	Net Rent (1)-(2)-(3)
Winter Wheat	96.25	5.00	15.17	76.08
Spring Barley	51.73	5.00	10.60	36.13
Soft White Spring Wheat	64.17	5.00	10.60	48.57

¹Expenses include fertilizer and crop insurance.

Table 2: Net Rent Calculations for Sharecropping Pea and Lentil Crops (\$/Acre)

	One-Fourth Crop Revenue (1)	Land Tax (2)	One-Fourth Expenses ¹ (3)	Net Rent (1)-(2)-(3)
Dry Peas	44.70	5.00	0.63	39.07
Lentils	55.20	5.00	0.94	49.26

¹Crop insurance expenses.

While owner-operators obviously will not experience a land rental cost, the rent cost represents a minimum return owner-operators must have to justify growing this crop on the land themselves. This net rental return represents the income owner-operators forego by not renting the land to a tenant. As a result of investing in land, farmers receive both current returns from farming and any long-term land value appreciation/depreciation. However, farmers would continue to receive land value appreciation even if the land were rented. Consequently, the appropriate land charge is the net rent lost. As used in this publication, land cost is termed an opportunity cost indicating that it is a foregone return rather than an out-of-pocket expense.

Fixed and Variable Costs of Production

Costs for these budgets are divided into two categories. **Fixed costs** are those costs incurred whether or not a crop is grown, specifically land costs and machinery depreciation. These costs will vary from farm to farm based on individual land ownership and machinery complement characteristics.

Machinery fixed costs include depreciation, interest, property taxes, and insurance for a typical machinery complement in this area. These costs do not vary with the crops produced and are incurred whether or not a crop is grown.

Machinery and tractor interest cost is calculated on the average annual investment in the equipment. The formula used to calculate the average annual machinery investment is

$$\frac{\text{Replacement Cost} + \text{Salvage Value}}{2}$$

Replacement cost may refer to new or used machinery (see Table A25 in Appendix). The 10.25% interest charge made against this average investment value represents interest paid on money borrowed to finance machine purchases or an opportunity cost for having the grower's own money tied up in machinery. Per acre machinery interest cost for a given operation is determined by multiplying the respective machine hours per acre for the given operation times per hour interest costs (Table A25).

Per acre machinery fixed costs for a specific field operation are determined by multiplying the machine hours per acre times the per-hour fixed cost (Table A25). The per-hour fixed cost figures are determined by dividing the total fixed cost figures by the annual hours of machinery use for the representative farm.

Land fixed costs include taxes and land rent less expenditures typically covered by the landlord (see Net Rent, page 4).

Variable costs are those costs directly associated with crop production, including fuel, oil, repairs, fertilizer, chemicals, custom work, overhead, and interest on operating capital. The labor for machinery operation, including that provided by the owner-operator, is also included as a variable cost.

Total cost is the sum of fixed and variable costs.

Due to the information and procedure followed, the budget should be viewed as "typical" or "representative" of the given farm size in the area rather than a mathematical average of a large number of producers. Where such factors as farm size, machinery complement and use, cultural practices, and yield differ from those assumed in this publication, quite different enterprise costs and returns may result.

COSTS AND RETURNS SUMMARY

Table 3 presents variable, fixed and total costs of production, and the break-even selling price for each crop in this bulletin. While these budgets include a labor charge for all operations as outlined in the assumptions, they do not include a specific charge for management. All budget assumptions need to be carefully studied in order to determine their relevance for a specific situation.

The break-even selling price in Table 3 is calculated as the price which would cover total production costs using the yield assumptions for this study. For example, the total production costs for winter wheat of \$246.49 divided by the expected yield of 75 bu/acre give a break-even price of \$3.29/bu. The price of wheat must be at least this high to cover all production costs listed in these budgets. Only winter wheat and lentils have break-even prices greater than the crop prices used in these budgets. Lentil prices are quite volatile, however; the current (early 1995) \$13.35/cwt market price falls short of the break-even price. Since winter wheat needs to be grown in rotation with other crops in order to maintain high yields, crop returns need to be examined over a rotation cycle as in Table 4.

Table 3: Variable, Fixed and Total Costs of Production and Break-Even Selling Price by Crop

Rotation/Crop	Yield (units/ acre)	Variable Costs (\$/acre)	Fixed Costs (\$/acre)	Total Costs (\$/acre)	Break-Even Selling Price (\$/unit)
Winter Wheat	75 bu	125.23	121.26	246.49	3.29
Spring Barley	1.75 ton	125.34	91.92	217.26	124.15
Spring Wheat	50 bu	137.56	105.19	242.75	4.86
Dry Peas	20 cwt	147.70	95.25	242.95	12.15
Spring Lentils	12 cwt	115.74	115.63	231.37	19.28
Summer Fallow	N/A	30.48	15.33	45.81	N/A

Average annual net returns are calculated over both variable and total costs of production for each crop rotation in Table 4. A negative net return figure means that the producer is not covering all costs including \$10 per hour for operator labor and 10.25% return on equity capital. The 10.25% return on equity and borrowed capital is represented by the interest charge on variable production costs as well as the tractor and machinery interest in the fixed costs portion of the budgets. A willingness to accept less than \$10 per hour for operator labor or less than 10.25% return on equity capital may result in a positive net return.

Rotation 6 (WW-SL) has considerably higher returns over variable and total costs (\$134.29 acre and \$15.84/acre) than the other rotations in this study (Table 4). The next most profitable rotation is Rotation 4 (WW-SW-SL), with returns of \$107.84/acre and -\$6.19/acre over variable and total costs. Raising the highly profitable winter wheat crop every other year versus every third year improves average profitability relative to the three-year rotations with lentils. However, research indicates winter wheat in a three-year rotation may out-yield wheat in a 2-year rotation due to wheat disease and weed problems; these results assume equal winter wheat yields for all rotations. (Table 5 compares returns over variable costs for winter wheat yields both 20% above and 20% below the 75 bushel average assumed here.) The rotations with spring lentils (Rotations 2, 4, and 6) rather than dry peas (Rotations 1, 3, and 5) are more profitable using the assumptions of this study. This result must be interpreted with caution, however, as the five-year average lentil price of \$18.40/cwt is much higher than the price at the time of this writing (early 1995) of \$13.35/cwt. Due to price fluctuations in the pea and lentil markets, returns over total and variable costs for these rotations are presented at various price levels in Table 6.

Table 4: Average Annual Net Returns Above Variable and Total Costs per Rotation Acre

Rotation	Average Annual Net Returns Over Variable Costs (\$/acre/year)	Average Annual Net Returns Over Total Costs (\$/acre/year)
Rotation 1:		
WW-SB-DP	74.82	-27.99
Rotation 2:		
WW-SB-SL	99.48	-10.13
Rotation 3:		
WW-SW-DP	83.19	-24.05
Rotation 4:		
WW-SW-SL	107.84	-6.19
Rotation 5:		
WW-DP	97.31	-10.94
Rotation 6:		
WW-SL	134.29	15.84

LEGEND: WW = Winter Wheat, SB = Spring Barley, DP = Dry Peas, SL = Spring Lentils, SW = Spring Wheat

NOTE: Yield assumptions are 75 bu/acre for winter wheat, 1.75 tons/acre for spring barley, 20 cwt/acre for dry peas, 12 cwt/acre for spring lentils, and 50 bu/acre for spring wheat. Price assumptions are \$3.85/bu for winter and spring wheat, \$88.68/ton for spring barley, \$8.94/cwt for dry peas and \$18.40/cwt for lentils.

As shown in Table 4, three-year rotations with spring wheat (WW-SW-DP and WW-SW-SL) average about \$8/acre/rotation higher returns over variable costs than rotations with spring barley (WW-SB-DP and WW-SB-SL). Of course, wheat base may be a constraint to switching from spring barley to spring wheat. Also, spring wheat does require more moisture than spring barley, so raising a profitable crop of spring wheat may be limited in years with lower than normal precipitation. Spring wheat breeders are currently working on developing varieties with higher expected yields for this region which would further enhance the profitability of this rotation.

Tables 5 and 6 present returns over variable costs for various yield and price levels. Since total costs include an opportunity cost for land equivalent to the landowners' crop-share, this cost will change as price and yield levels change. Variable costs include only those costs directly associated with crop production, so these costs remain relatively constant for changes in crop price and yield levels. Thus, it is only accurate to compare profitability for changes in prices and yields for returns over variable costs.

As can be seen in Table 5, 2-year rotations with wheat are much more sensitive to changes in wheat yield than the three-year rotations. As wheat yield falls, the 2-year rotations become relatively less profitable. If the 2-year winter wheat-pea rotation has a 60 bu/acre wheat crop while the three-year winter wheat-spring grain-pea rotations have a wheat yield of 75 bu/acre, the three-year rotations become more profitable than the 2-year rotation. Research indicates that wheat disease or weed problems are more likely to occur in the 2-year rotations.

Table 6 compares returns over variable costs under three price levels for peas and lentils rather than the five-year average price used in the previous tables. At the time of this writing (early 1995), pea prices are at the high price level while lentil prices are at the low level. Under these price assumptions, Rotation 5, WW-DP, is most profitable at \$127.91/acre, followed by Rotation 3, WW-SW-DP, at \$103.59/acre. The 2-year WW-SL rotation is next most profitable at \$101.89/acre. The price volatility of these two pulse crops greatly impacts the relative profitability of these six rotations.

These examples using various yield and price levels illustrate the importance of these assumptions in comparing the profitability of various rotations. Of course, price fluctuations are beyond the control of the individual farmer, but price trends and projections may provide some guidance in making planting decisions. While yields for all systems are subject to the same yearly fluctuations in weather, the relative impacts on 2- and 3-year rotations may differ.

Table 5: Average Annual Net Returns Above Variable Costs per Rotation Acre for a Range of Winter Wheat Yield Assumptions

Rotation	Yield for Winter Wheat		
	90 bu/acre	75 bu/acre	60 bu/acre
Rotation 1: WW-SB-DP	94.07	74.82	55.57
Rotation 2: WW-SB-SL	118.73	99.48	80.23
Rotation 3: WW-SW-DP	102.44	83.19	63.94
Rotation 4: WW-SW-SL	127.09	107.84	88.59
Rotation 5: WW-DP	126.18	97.31	68.44
Rotation 6: WW-SL	163.16	134.29	105.42

LEGEND: WW = Winter Wheat, SB = Spring Barley, DP = Dry Peas, SL = Spring Lentils, SW = Spring Wheat

NOTE: Yield assumptions are 1.75 tons/acre for spring barley, 20 cwt/acre for dry peas, 12 cwt/acre for spring lentils, and 50 bu/acre for spring wheat. Price assumptions are \$3.85/bu for winter and spring wheat, \$88.68/ton for spring barley, \$8.94/cwt for dry peas and \$18.40/cwt for lentils.

Table 6: Average Annual Net Returns Above Variable Costs per Rotation Acre for a Range of Pea and Lentil Prices

Rotation	Price Level for Peas or Lentils		
	High	Medium	Low
Rotation 1: WW-SB-DP	95.22	81.89	68.56
Rotation 2: WW-SB-SL	93.88	85.88	77.88
Rotation 3: WW-SW-DP	103.59	90.25	76.92
Rotation 4: WW-SW-SL	102.24	94.24	86.24
Rotation 5: WW-DP	127.91	107.91	87.91
Rotation 6: WW-SL	125.89	113.89	101.89

LEGEND: WW = Winter Wheat, SB = Spring Barley, DP = Dry Peas, SL = Spring Lentils, SW = Spring Wheat

Price assumptions for peas and lentils are as follows:

High = \$12/cwt for peas, \$17/cwt for lentils
 Medium = \$10/cwt for peas, \$15/cwt for lentils
 Low = \$8/cwt for peas, \$13/cwt for lentils

NOTE: Yield assumptions are 75 bu/acre for winter wheat, 1.75 tons/acre for spring barley, and 50 bu/acre for spring wheat. Price assumptions are \$3.85/bu for winter and spring wheat and \$88.68/ton for spring barley.

NOTE ON BUDGET INFORMATION

The budget information for these six rotations is reported in 26 separate tables in the Appendix.

Appendix Tables A1, A4, A7, A10, A13, and A16: Schedule of Operations and Costs Per Acre

These tables outline the schedule of field operations by calendar month, the type of machinery used, and labor and machinery hours per acre for the six rotations in this study.

Appendix Tables A2, A5, A8, A11, A14 and A17: Materials and Services

These tables list specific services and materials used, quantities used and prices paid for materials and services listed under the "Service" and "Materials" columns in Appendix Tables 1, 4, 7, 10, 13, and 16.

Appendix Tables A3, A6, A9, A12, A15 and A18: Summary of Production Costs Per Acre

These tables itemize the costs appearing in Appendix Tables 1, 4, 7, 10, 13 and 16.

Appendix Tables A19, A20, A21, A22, A23 and A24: Summary of Receipts, Costs and Profitability Per Acre

These tables summarize the per-acre returns, costs and profitability over the rotational period for each rotation.

The first profit measure is gross receipts, which is total crop receipts over the rotational period. The second profit measure, net returns to management, is gross receipts less total variable costs, machinery fixed expenses, interest on summer fallow costs, net rent and land taxes. This represents returns to the owner-operator after accounting for all costs including \$10.00 per hour for labor plus 10.25% return on equity capital.

Table A25: Hourly Machine Costs

Appendix Table A25 presents the estimated fixed and variable costs per hour of use for the machinery complement used in this study. It also lists their replacement value (new or used) and years of life before trade-in. Machinery fixed costs include depreciation, interest on investment, property taxes and insurance. Machinery prices represent the current cost of replacing the machinery complement for the representative farm used in this study. It should also be noted that interest on investment represents a 10.25% opportunity cost to the enterprise. These are earnings foregone by investing in the machinery complement rather than in the next best alternative investment.

Machinery variable costs include machinery repair, fuel and lubrication costs. These are costs that vary with the crop grown or the number of acres produced.

Table A26: Prices of Inputs

This table lists prices for materials and services used in these budgets.

CONCLUDING NOTE

The results of these budgets are entirely dependent upon the chosen procedures and assumptions. These budgets do not represent any one particular operation. They should be used as a general guide to help derive budgets for individual operations. Finally, this publication does not recommend production practices. Rather, it is an attempt to present current technology used to produce the standard crops grown in eastern Whitman County, Washington.

APPENDIX

Detailed Budget Tables

TABLE A1: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR WINTER WHEAT, EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH YEAR	MACH HOURS	LABOR HOURS	VARIABLE COST							TOTAL VARIABLE COST	TOTAL COST
					TOTAL FIXED COST	FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.			
					\$	\$	\$	\$	\$	\$	\$	\$	
SPOT SPRAY	SPRAY CHEAT GRASS, 10% OF LAND	SEP 1994	.01	.01	.09	.07	.05	.15	2.10	.22	2.59	2.67	
FERTILIZE	300HP-WT, RENTED RIPPER SHOOTR	SEP 1994	.08	.10	1.56	1.20	1.00	2.50	43.00	4.48	52.19	53.75	
CULTIWEED	300HP-WT, 36' CULTIWEEDER	SEP 1994	.07	.07	3.06	1.58	.73	.00	.00	.22	2.53	5.59	
HAUL SEED	2 TON TRUCK	SEP 1994	.03	.03	.41	.33	.29	.00	.00	.06	.67	1.08	
PLANT	200HP-CT, 36' DBL. DISC DRILL	SEP 1994	.07	.08	5.51	1.80	.84	.00	11.90	1.37	15.91	21.42	
HAUL WATER	2 TON TRUCK W/ SLIP TANK	APR 1995	.01	.01	.08	.07	.05	.00	.00	.00	.12	.20	
SPOT SPRAY	SPRAY WILD OATS, 10% OF LAND	APR 1995	.01	.01	.09	.07	.05	.15	2.10	.08	2.44	2.53	
APPLY HERBICIDE	300HP-WT, 80' RENTED SPRAYER	APR 1995	.02	.03	.41	.31	.30	1.50	13.60	.54	16.25	16.65	
CROP INSURANCE	FIRE AND HAIL	JUN 1995	.00	.00	.00	.00	.00	3.48	.00	.06	3.54	3.54	
HARVEST	22' COMBINE	AUG 1995	.25	.06	21.46	5.92	.60	3.00	.00	.00	9.52	30.98	
HAUL	2 TON TRUCK	AUG 1995	.10	.00	1.62	1.31	.00	1.12	.00	.00	2.43	4.06	
HAUL	TANDEM AXLE TRUCK	AUG 1995	.10	.00	2.38	2.15	.00	1.12	.00	.00	3.27	5.65	
MACHINE TRANSPT	2 TON TRUCK	ANN 1995	.01	.01	.16	.13	.11	.00	.00	.01	.26	.42	
WEED CONTROL	4WD ATV W/SPRAYER	ANN 1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95	
MISC USE	4WD ATV	ANN 1995	.04	.05	.22	.07	.49	.00	.00	.03	.59	.81	
MISC USE	52HP-WT W/BUCKET	ANN 1995	.05	.06	1.19	1.07	.58	.00	.00	.08	1.73	2.92	
MISC USE	3/4 TON PICKUP	ANN 1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33	
LAND COST	NET RENT	ANN 1995	.00	.00	76.08	.00	.00	.00	.00	.00	.00	76.08	
TAXES	LAND TAXES	ANN 1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00	
OVERHEAD	UTILITIES, LEGAL, ACCT, ETC.	ANN 1995	.00	.00	.00	.00	.00	.00	5.96	.00	5.96	5.96	
TOTAL PER ACRE			1.10	.82	121.26	17.45	8.19	13.02	79.16	7.41	125.23	246.49	

TABLE A2: MATERIALS AND SERVICES FOR WINTER WHEAT

OPERATION	MONTH	MATERIAL AND/OR SERVICE
FERTILIZE	SEPTEMBER	RENTAL OF 27' RIPPER SHOOTER @ \$2.50/ACRE 100 LBS. OF NITROGEN @ \$0.31/LB. 15 LBS. OF SULFUR @ \$0.35/LB. 15 LBS. OF PHOSPHATE @ \$0.45/LB.
PLANT	SEPTEMBER	85 LBS. OF WHEAT SEED @ \$0.14/LB.
APPLY HERBICIDE	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 0.33 OUNCE OF HARMONY-XTRA @ \$14.20/OUNCE 16.0 OUNCES OF BUCTRIL @ \$0.50/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
CROP INSURANCE	JUNE	FIRE AND HAIL INSURANCE @ \$3.48/ACRE
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST.

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A3: ITEMIZED COST PER ACRE FOR WINTER WHEAT, EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR	QUANTITY	VALUE OR	YOUR
		UNIT COST/UNIT		COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	.10	.15	_____
HOELON	PT.	8.39	.25	2.10	_____
WHEAT SEED	LB.	.14	85.00	11.90	_____
RIPPER SHOOTER	ACRE	2.50	1.00	2.50	_____
NITROGEN (AI)	LB.	.31	100.00	31.00	_____
SULFUR (AI)	LB.	.35	15.00	5.25	_____
PHOSPHATE (AI)	LB.	.45	15.00	6.75	_____
80' SPRAYER	ACRE	1.50	.10	.15	_____
HOELON	PT.	8.39	.25	2.10	_____
80' SPRAYER	ACRE	1.50	1.00	1.50	_____
HARMONY-XTRA	OZ.	14.20	.33	4.73	_____
BUCTRIL	OZ.	.50	16.00	8.00	_____
SURFACTANT	OZ.	.14	6.40	.86	_____
FIRE & HAIL INSUR.	ACRE	3.48	1.00	3.48	_____
TRUCK DRIVER	HOURL	6.50	.34	2.42	_____
COMBINE DRIVER	HOURL	12.00	.25	3.00	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	2.51	1.00	2.51	_____
TRACTOR FUEL/LUBE	ACRE	2.34	1.00	2.34	_____
MACHINERY REPAIRS	ACRE	9.76	1.00	9.76	_____
MACHINE FUEL/LUBE	ACRE	2.85	1.00	2.85	_____
LABOR (TRAC/MACH)	ACRE	8.19	1.00	8.19	_____
INTEREST ON OP. CAP.	DOL.	7.41	1.00	7.41	_____
OVERHEAD	DOL.	.05	119.27	5.96	_____

TOTAL VARIABLE COST				125.23	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	2.79	1.00	2.79	_____
TRACTOR INTEREST	ACRE	2.88	1.00	2.88	_____
TRACTOR INSURANCE	ACRE	.17	1.00	.17	_____
TRACTOR TAXES	ACRE	.51	1.00	.51	_____
TRACTOR HOUSING	ACRE	.28	1.00	.28	_____
MACHINE DEPRECIATION	ACRE	17.53	1.00	17.53	_____
MACHINE INTEREST	ACRE	12.12	1.00	12.12	_____
MACHINE INSURANCE	ACRE	.71	1.00	.71	_____
MACHINE TAXES	ACRE	2.13	1.00	2.13	_____
MACHINE HOUSING	ACRE	1.18	1.00	1.18	_____
LAND COST	ACRE	76.08	1.00	76.08	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				121.26	_____
TOTAL COST				246.49	_____

TABLE A4: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR SPRING BARLEY, EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH YEAR	MACH HOURS	LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.		
						\$	\$	\$	\$	\$	\$	\$
PLOW	300HP-WT, 19' MOLDBOARD PLOW	SEP 1994	.20	.22	7.49	4.40	2.20	.00	.00	.62	7.22	14.71
APPLY HERBICIDE	300HP-WT, 80' RENTED SPRAYER	MAR 1995	.04	.05	.81	.63	.46	1.50	3.79	.27	6.65	7.46
CULTIVATE/HARROW	300HP-CT, 36' CULTIVATOR	APR 1995	.07	.07	3.06	1.58	.74	.00	.00	.08	2.40	5.46
HARROW	300HP-WT, 60' FLEX HARROW	APR 1995	.03	.04	1.40	.86	.36	.00	.00	.04	1.27	2.67
FERTILIZE	300HP-WT, APPLICATOR SUPPLIED	APR 1995	.05	.06	1.01	.78	.58	.00	31.80	1.13	34.29	35.30
CULT/HARROW/SPRY	300HP-WT, 36' CULT/HARROW/SPRA	APR 1995	.07	.07	2.58	1.42	.74	.00	13.03	.52	15.70	18.28
HAUL SEED	2 TON TRUCK	APR 1995	.01	.02	.16	.13	.20	.00	.00	.01	.34	.50
PLANT	200HP-CT, 36' DBL. DISC DRILL	APR 1995	.07	.08	5.24	1.72	.80	.00	11.48	.48	14.47	19.71
APPLY HERBICIDE	300HP-WT, 80' SPRAYER	MAY 1995	.04	.05	.81	.63	.46	1.50	9.86	.32	12.77	13.58
CROP INSURANCE	FIRE & HAIL	MAY 1995	.00	.00	.00	.00	.00	2.13	.00	.05	2.18	2.18
HARVEST	22' COMBINE	JUL 1995	.25	.06	21.46	5.92	.60	3.00	.00	.08	9.60	31.06
HAUL	2 TON TRUCK	JUL 1995	.10	.00	1.62	1.31	.00	1.12	.00	.02	2.46	4.08
HAUL	TANDEM AXLE TRUCK	JUL 1995	.10	.00	2.38	2.15	.00	1.12	.00	.03	3.30	5.68
MACHINE TRANSPT	2 TON TRUCK	ANN 1995	.01	.01	.16	.13	.11	.00	.00	.01	.26	.42
WEED CONTROL	4WD ATV W/SPRAYER	ANN 1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95
MISC USE	4WD ATV	ANN 1995	.04	.05	.22	.07	.49	.00	.00	.03	.59	.81
MISC USE	52HP-WT W/BUCKET	ANN 1995	.05	.06	.32	.05	.58	.00	.00	.03	.66	.98
MISC USE	3/4 TON PICKUP	ANN 1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33
LAND COST	NET RENT	ANN 1995	.00	.00	36.13	.00	.00	.00	.00	.00	.00	36.13
TAXES	LAND TAXES	ANN 1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00
OVERHEAD	UTILITIES, LEGAL, ACCT, ETC.	ANN 1995	.00	.00	.00	.00	.00	.00	5.97	.00	5.97	5.97
TOTAL PER ACRE			1.40	1.14	91.92	23.15	11.42	10.37	76.42	3.99	125.34	217.26

TABLE A5: MATERIALS AND SERVICES FOR SPRING BARLEY

OPERATION	MONTH	MATERIAL AND/OR SERVICE
APPLY HERBICIDE	MARCH	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 8.0 OUNCES OF ROUNDUP-RT @ \$0.34/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE 1.7 LBS. OF AMMONIUM SULFATE @ \$0.12/LB.
FERTILIZE	APRIL	80 LBS. OF NITROGEN @ \$0.31/LB. 20 LBS. OF SULFUR @ \$0.35/LB.
CULT./SPRAY/HAR ROW	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE 1.25 QUARTS OF FARGO @ \$10.42/QUART
PLANT	APRIL	85.0 LBS. OF BARLEY SEED @ \$0.135/LB.
APPLY HERBICIDE	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 4 PINTS OF CHIPTOX @ \$2.25/PINT 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
CROP INSURANCE	JUNE	FIRE AND HAIL INSURANCE @ \$2.13/ACRE
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST.

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A6: ITEMIZED COST PER ACRE FOR SPRING BARLEY, EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR		VALUE OR	YOUR
	UNIT	COST/UNIT	QUANTITY	COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	1.00	1.50	_____
ROUNDUP-RT	OZ.	.34	8.00	2.72	_____
SURFACTANT	OZ.	.14	6.40	.86	_____
AMMON. SULFATE	LB.	.12	1.70	.20	_____
BARLEY SEED	LB.	.14	85.00	11.48	_____
FARGO	QT.	10.42	1.25	13.03	_____
NITROGEN (AI)	LB.	.31	80.00	24.80	_____
SULFUR (AI)	LB.	.35	20.00	7.00	_____
FIRE & HAIL INSUR.	ACRE	2.13	1.00	2.13	_____
80' SPRAYER	ACRE	1.50	1.00	1.50	_____
SURFACTANT	OZ.	.14	6.40	.86	_____
MCPA ESTER	PINT	2.25	4.00	9.00	_____
TRUCK DRIVER	HOUR	6.50	.34	2.24	_____
COMBINE DRIVER	HOUR	12.00	.25	3.00	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	4.27	1.00	4.27	_____
TRACTOR FUEL/LUBE	ACRE	5.05	1.00	5.05	_____
MACHINERY REPAIRS	ACRE	11.11	1.00	11.11	_____
MACHINE FUEL/LUBE	ACRE	2.72	1.00	2.72	_____
LABOR (TRAC/MACH)	ACRE	11.42	1.00	11.42	_____
INTEREST ON OP. CAP.	DOL.	3.99	1.00	3.99	_____
OVERHEAD	DOL.	.05	119.37	5.97	_____

TOTAL VARIABLE COST				125.34	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	5.22	1.00	5.22	_____
TRACTOR INTEREST	ACRE	5.73	1.00	5.73	_____
TRACTOR INSURANCE	ACRE	.34	1.00	.34	_____
TRACTOR TAXES	ACRE	1.01	1.00	1.01	_____
TRACTOR HOUSING	ACRE	.56	1.00	.56	_____
MACHINE DEPRECIATION	ACRE	19.34	1.00	19.34	_____
MACHINE INTEREST	ACRE	13.96	1.00	13.96	_____
MACHINE INSURANCE	ACRE	.82	1.00	.82	_____
MACHINE TAXES	ACRE	2.45	1.00	2.45	_____
MACHINE HOUSING	ACRE	1.36	1.00	1.36	_____
LAND COST	ACRE	36.13	1.00	36.13	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				91.92	_____
TOTAL COST				217.26	_____

TABLE A7: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR SPRING WHEAT, EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH YEAR	MACH HOURS	LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.		
						\$	\$	\$	\$	\$	\$	\$
PLOW	300HP-WT, 19' CHISEL PLOW	OCT 1994	.20	.22	7.49	4.40	2.20	.00	.00	.56	7.16	14.65
APPLY HERBICIDE	300HP-WT, 80' RENTED SPRAYER	MAR 1995	.02	.03	.43	.33	.25	1.50	3.58	.24	5.90	6.33
CULTIVATE/HARROW	300HP-WT, 36' CULT/TINE HARROW	APR 1995	.07	.07	2.58	1.42	.74	.00	.00	.07	2.23	4.81
APPLY HERBICIDE	300HP-WT, 80' RENTED SPRAYER	APR 1995	.04	.05	.81	.63	.46	1.50	13.60	.55	16.73	17.55
HARROW/SPRAY	300HP-WT, 60' HARROW, SPRAYER	APR 1995	.07	.07	2.84	1.75	.74	1.50	13.03	.58	17.60	20.44
HARROW	300HP-WT, 60' FLEX HARROW	APR 1995	.07	.07	2.84	1.75	.74	.00	.00	.09	2.58	5.42
FERTILIZE	300HP-WT, FERTILIZER APPLICATR	APR 1995	.05	.06	1.01	.78	.58	.00	31.80	1.13	34.29	35.30
HAUL SEED	2 TON TRUCK	APR 1995	.01	.02	.16	.13	.20	.00	.00	.01	.34	.50
PLANT	200HP-CT, 36' DBL DSC DRILL	APR 1995	.07	.08	5.24	1.72	.80	.00	13.30	.54	16.36	21.60
CROP INSURANCE	FIRE & HAIL	JUN 1995	.00	.00	.00	.00	.00	2.18	.00	.04	2.22	2.22
INSECT CONTROL	CUSTOM AERIAL, DIMETHOATE 30%	JUN 1995	.00	.00	.00	.00	.00	1.50	1.87	.06	3.43	3.43
HARVEST	22' COMBINE	AUG 1995	.25	.08	21.46	5.92	.80	3.00	.00	.00	9.72	31.18
HAUL	TANDEM AXLE TRUCK	AUG 1995	.10	.00	2.38	2.15	.00	1.12	.00	.00	3.27	5.65
HAUL	2 TON TRUCK	AUG 1995	.10	.00	1.62	1.31	.00	1.12	.00	.00	2.43	4.06
MACHINE TRANSPT	2 TON TRUCK	ANN 1995	.01	.01	.16	.13	.11	.00	.00	.01	.26	.42
WEED CONTROL	4WD ATV W/SPRAYER	ANN 1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95
MISC USE	4WD ATV	ANN 1995	.04	.05	.22	.07	.49	.00	.00	.03	.59	.81
MISC USE	52HP-WT W/BUCKET	ANN 1995	.05	.06	.32	.05	.58	.00	.00	.03	.66	.98
MISC USE	3/4 TON PICKUP	ANN 1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33
LAND COST	NET RENT	ANN 1995	.00	.00	48.57	.00	.00	.00	.00	.00	.00	48.57
TAXES	LAND TAXES	ANN 1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00
OVERHEAD	UTILITIES, LEGAL, ACCT, ETC.	ANN 1995	.00	.00	.00	.00	.00	.00	6.55	.00	6.55	6.55
TOTAL PER ACRE			1.41	1.18	105.19	23.91	11.79	13.42	84.23	4.21	137.56	242.75

TABLE A8: MATERIALS AND SERVICES FOR SPRING WHEAT

OPERATION	MONTH	MATERIAL AND/OR SERVICE
APPLY HERBICIDE	MARCH	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 8.0 OUNCES OF ROUNDUP-RT @ \$0.34/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
FERTILIZE	APRIL	80 LBS. OF NITROGEN @ \$0.31/LB. 20 LBS. OF SULFUR @ \$0.35/LB.
PLANT	APRIL	95.0 LBS. OF WHEAT SEED @ \$0.14/LB.
APPLY HERBICIDE	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 1.25 QUARTS OF FARGO @ \$10.42/QUART
APPLY HERBICIDE	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 0.33 OUNCE OF HARMONY-XTRA @ \$14.20/OUNCE 12.0 OUNCES OF BUCTRIL @ \$0.50/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
INSECT CONTROL	JUNE	CUSTOM AERIAL @ \$5.00/ACRE 0.5 PTS. OF DIMETHOATE @ \$ 3.74/PT.
CROP INSURANCE	JUNE	FIRE AND HAIL INSURANCE @ \$2.13/ACRE
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A9: ITEMIZED COST PER ACRE FOR SPRING WHEAT, EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR		VALUE OR	YOUR
		UNIT COST/UNIT	QUANTITY	COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	3.00	4.50	_____
ROUNDUP-RT	OZ.	.34	8.00	2.72	_____
SURFACTANT	OZ.	.14	6.40	.86	_____
WHEAT SEED	LB.	.14	95.00	13.30	_____
NITROGEN (AI)	LB.	.31	80.00	24.80	_____
SULFUR (AI)	LB.	.35	20.00	7.00	_____
HARMONY-XTRA	OZ.	14.20	.33	4.73	_____
BUCTRIL	OZ.	.50	16.00	8.00	_____
SURFACTANT	OZ.	.14	6.40	.86	_____
FARGO	QT.	10.42	1.25	13.03	_____
FIRE & HAIL INSUR.	ACRE	2.18	1.00	2.18	_____
CUSTOM AERIAL	ACRE	5.00	.30	1.50	_____
DIMETHOATE	PT.	3.74	.50	1.87	_____
TRUCK DRIVER	HOUR	6.50	.34	2.24	_____
COMBINE DRIVER	HOUR	12.00	.25	3.00	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	4.40	1.00	4.40	_____
TRACTOR FUEL/LUBE	ACRE	5.21	1.00	5.21	_____
MACHINERY REPAIRS	ACRE	11.59	1.00	11.59	_____
MACHINE FUEL/LUBE	ACRE	2.72	1.00	2.72	_____
LABOR (TRAC/MACH)	ACRE	11.79	1.00	11.79	_____
INTEREST ON OP. CAP.	DOL.	.10	41.04	4.21	_____
OVERHEAD	DOL.	.05	131.01	6.55	_____

TOTAL VARIABLE COST				137.56	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	5.37	1.00	5.37	_____
TRACTOR INTEREST	ACRE	5.90	1.00	5.90	_____
TRACTOR INSURANCE	ACRE	.35	1.00	.35	_____
TRACTOR TAXES	ACRE	1.04	1.00	1.04	_____
TRACTOR HOUSING	ACRE	.58	1.00	.58	_____
MACHINE DEPRECIATION	ACRE	19.41	1.00	19.41	_____
MACHINE INTEREST	ACRE	14.26	1.00	14.26	_____
MACHINE INSURANCE	ACRE	.83	1.00	.83	_____
MACHINE TAXES	ACRE	2.50	1.00	2.50	_____
MACHINE HOUSING	ACRE	1.39	1.00	1.39	_____
LAND COST	ACRE	48.57	1.00	48.57	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				105.19	_____
TOTAL COST				242.75	_____

TABLE A10: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR SPRING PEAS, EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH YEAR	MACH HOURS	LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.		
PLOW	300HP-WT, 19' MOLDBOARD PLOW	SEP 1994	.20	.22	\$ 7.49	\$ 4.40	\$ 2.20	\$.00	\$.00	\$.62	\$ 7.22	\$ 14.71
SPRAY WEEDS	SPRING WEED SPRAY 50% OF LAND	MAR 1995	.02	.03	.43	.33	.25	.75	1.79	.13	3.25	3.68
CULTIVATE/HARROW	300HP-WT, 36' CULT/TINE HARROW	APR 1995	.07	.07	2.58	1.42	.74	.00	.00	.07	2.23	4.81
CULTIVATE/HARROW	300HP-WT, 36' CULT/TINE HARROW	APR 1995	.07	.07	2.58	1.42	.74	.00	.00	.07	2.23	4.81
CULT/SPRAY/HAR	300HP-WT, 36' CULT/SPRAYER/HAR	APR 1995	.07	.07	2.58	1.42	.74	1.50	29.53	1.13	34.32	36.90
HAUL SEED	2 TON TRUCK	MAY 1995	.01	.02	.16	.13	.20	.00	.00	.01	.34	.50
PLANT	200HP-CT, 36' DOUBLE DISC DRIL	MAY 1995	.07	.09	5.24	1.72	.87	.00	40.00	1.09	43.68	48.92
PACK	300HP-WT, 40' PACKER	MAY 1995	.04	.04	1.60	.81	.44	.00	.00	.03	1.28	2.88
INSURANCE	FIRE & HAIL	JUN 1995	.00	.00	.00	.00	.00	2.50	.00	.04	2.54	2.54
INSECT CONTROL	CUSTOM AERIAL, IMIDAN	JUN 1995	.00	.00	.00	.00	.00	5.00	5.76	.18	10.94	10.94
INSECT CONTROL	CUSTOM AERIAL, DIMETHOATE	JUL 1995	.00	.00	.00	.00	.00	5.00	5.61	.09	10.70	10.70
COMBINE	22' HILL COMBINE	AUG 1995	.25	.08	21.46	5.92	.80	3.00	.00	.00	9.72	31.18
HAUL	TANDEM AXLE TRUCK	AUG 1995	.10	.00	2.38	2.15	.00	1.12	.00	.00	3.27	5.65
HAUL	2 TON TRUCK	AUG 1995	.10	.00	1.62	1.31	.00	1.12	.00	.00	2.43	4.06
MACHINE TRANSPT	2 TON TRUCK	ANN 1995	.01	.01	.53	.12	.10	.00	.00	.01	.23	.76
WEED CONTROL	4WD ATV W/SPRAYER	ANN 1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95
MISC USE	52HP-WT W/BUCKET	ANN 1995	.05	.06	.32	.05	.60	.00	.00	.03	.68	1.00
MISC USE	4WD ATV	ANN 1995	.02	.02	.15	.11	.23	.00	.00	.02	.35	.51
MISC USE	3/4 TON 4WD PICKUP	ANN 1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33
LAND COST	NET RENT	ANN 1995	.00	.00	39.07	.00	.00	.00	.00	.00	.00	39.07
TAXES	LAND TAX	ANN 1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00
OVERHEAD	UTIL., LEGAL, ACCT., ETC.	ANN 1995	.00	.00	.00	.00	.00	.00	7.03	.00	7.03	7.03
TOTAL PER ACRE			1.34	1.10	95.25	22.67	11.02	19.99	90.22	3.80	147.70	242.95

TABLE A11: MATERIALS AND SERVICES FOR DRY PEAS

OPERATION	MONTH	MATERIAL AND/OR SERVICE
CULT/SPRAY/HAR ROW	APRIL	RENTED SPRAYER @ \$1.50/ACRE 1.25 QUARTS OF FARGO @ \$10.42/QT. 3.0 OUNCES OF PURSUIT @ \$5.50/OZ.
PLANT	MAY	200 LBS. OF PEA SEED @ \$0.20/LB.
INSURANCE	JUNE	FIRE AND HAIL INSURANCE @ \$2.50/ACRE
INSECT CONTROL	JUNE	CUSTOM AERIAL @ \$5.00/ACRE 1.5 LBS. OF IMIDAN @ \$3.84/LB.
INSECT CONTROL	JULY	CUSTOM AERIAL @ \$5.00/ACRE 1.5 PINTS OF DIMETHOATE @ \$3.74/PINT
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A12: ITEMIZED COST PER ACRE FOR SPRING PEAS, EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR		VALUE OR	YOUR
		UNIT COST/UNIT	QUANTITY	COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	1.50	2.25	_____
ROUNDUP-RT	OZ.	.34	4.00	1.36	_____
SURFACTANT	OZ.	.14	3.20	.43	_____
FARGO	QT.	10.42	1.25	13.03	_____
PURSUIT	OZ.	5.50	3.00	16.50	_____
PEA SEED	LB.	.20	200.00	40.00	_____
FIRE & HAIL INSUR.	ACRE	2.50	1.00	2.50	_____
CUSTOM AERIAL	ACRE	5.00	2.00	10.00	_____
IMIDAN	LB.	3.84	1.50	5.76	_____
DIMETHOATE	PT.	3.74	1.50	5.61	_____
COMBINE DRIVER	HOUR	12.00	.25	3.00	_____
TRUCK DRIVER	HOUR	6.50	.34	2.24	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	4.08	1.00	4.08	_____
TRACTOR FUEL/LUBE	ACRE	4.81	1.00	4.81	_____
MACHINERY REPAIRS	ACRE	11.13	1.00	11.13	_____
MACHINE FUEL/LUBE	ACRE	2.65	1.00	2.65	_____
LABOR (TRAC/MACH)	ACRE	11.02	1.00	11.02	_____
INTEREST ON OP. CAP.	DOL.	3.80	1.00	3.80	_____
OVERHEAD	DOL.	.05	140.66	7.03	_____

TOTAL VARIABLE COST				147.70	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	5.00	1.00	5.00	_____
TRACTOR INTEREST	ACRE	5.48	1.00	5.48	_____
TRACTOR INSURANCE	ACRE	.32	1.00	.32	_____
TRACTOR TAXES	ACRE	.96	1.00	.96	_____
TRACTOR HOUSING	ACRE	.53	1.00	.53	_____
MACHINE DEPRECIATION	ACRE	19.68	1.00	19.68	_____
MACHINE INTEREST	ACRE	14.42	1.00	14.42	_____
MACHINE INSURANCE	ACRE	.84	1.00	.84	_____
MACHINE TAXES	ACRE	2.53	1.00	2.53	_____
MACHINE HOUSING	ACRE	1.41	1.00	1.41	_____
LAND COST	ACRE	39.07	1.00	39.07	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				95.25	_____
TOTAL COST				242.95	_____

TABLE A13: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR SPRING LENTILS, EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH	YEAR	MACH HOURS	LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
							FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.		
						\$	\$	\$	\$	\$	\$	\$	
PLOW	300HP-WT, 19' MOLDBOARD PLOW	SEP	1994	.20	.22	7.49	4.40	2.20	.00	.00	.62	7.22	14.71
CULTIVATE/HARROW	300HP-WT, 36' CULT/TINE HARROW	APR	1995	.07	.07	2.58	1.42	.74	.00	.00	.07	2.23	4.81
CULT/SPRAY/HAR	300HP-WT, 36' CULT/SPRAYER/HAR	APR	1995	.07	.07	2.58	1.42	.74	1.50	29.53	1.13	34.32	36.90
CULTIVATE/HARROW	300HP-WT, 36' CULT/TINE HARROW	APR	1995	.07	.07	2.58	1.42	.74	.00	.00	.07	2.23	4.81
HAUL SEED	2 TON TRUCK	MAY	1995	.01	.02	.16	.13	.20	.00	.00	.01	.34	.50
PLANT	200HP-CT, 36' DOUBLE DISC DRIL	MAY	1995	.07	.09	5.24	1.72	.87	.00	17.55	.52	20.65	25.89
PACK	300HP-WT, 40' PACKER	MAY	1995	.04	.04	1.60	.81	.44	.00	.00	.03	1.28	2.88
INSURANCE	FIRE & HAIL	JUN	1995	.00	.00	.00	.00	.00	3.75	.00	.06	3.81	3.81
INSECT CONTROL	CUSTOM AERIAL, DIMETHOATE	JUL	1995	.00	.00	.00	.00	.00	5.00	5.61	.09	10.70	10.70
SWATHE	300HP-WT, 14' SWATHER	AUG	1995	.14	.16	7.26	3.81	1.60	.00	.00	.00	5.41	12.67
COMBINE	22' HILL COMBINE	AUG	1995	.25	.08	21.46	5.92	.80	3.00	.00	.00	9.72	31.18
HAUL	2 TON TRUCK	AUG	1995	.10	.00	5.28	1.18	.00	1.12	.00	.00	2.30	7.57
HAUL	TANDEM AXLE TRUCK	AUG	1995	.10	.00	2.38	2.15	.00	1.12	.00	.00	3.27	5.65
MACHINE TRANSPT	2 TON TRUCK	ANN	1995	.01	.01	.16	.13	.10	.00	.00	.01	.24	.41
WEED CONTROL	4WD ATV W/SPRAYER	ANN	1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95
MISC USE	3/4 TON 4WD PICKUP	ANN	1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33
MISC USE	52HP-WT W/BUCKET	ANN	1995	.05	.06	.32	.05	.60	.00	.00	.03	.68	1.00
MISC USE	4WD ATV	ANN	1995	.04	.05	.22	.07	.49	.00	.00	.03	.59	.81
LAND COST	NET RENT	ANN	1995	.00	.00	49.26	.00	.00	.00	.00	.00	.00	49.26
TAXES	LAND TAX	ANN	1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00
OVERHEAD	UTIL., LEGAL, ACCT., ETC.	ANN	1995	.00	.00	.00	.00	.00	.00	5.51	.00	5.51	5.51
TOTAL PER ACRE				1.48	1.26	115.63	25.99	12.62	15.49	58.70	2.94	115.74	231.37

TABLE A14: MATERIALS AND SERVICES FOR SPRING LENTILS

OPERATION	MONTH	MATERIAL AND/OR SERVICE
CULT/SPRAY/HARROW	APRIL	RENTED SPRAYER @ \$1.50/ACRE 1.25 QUARTS OF FARGO @ \$10.42/QT. 3.0 OUNCES OF PURSUIT @ \$5.50/OZ.
PLANT	MAY	65 LBS. OF LENTIL SEED @ \$0.27/LB.
INSURANCE	JUNE	FIRE AND HAIL INSURANCE @ \$3.75/ACRE
INSECT CONTROL	JULY	CUSTOM AERIAL @ \$5.00/ACRE 1.5 PINTS OF DIMETHOATE @ \$3.74/PINT
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A15: ITEMIZED COST PER ACRE FOR SPRING LENTILS, EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR		VALUE OR	YOUR
		UNIT COST/UNIT	QUANTITY	COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	1.00	1.50	_____
FARGO	QT.	10.42	1.25	13.03	_____
PURSUIT	OZ.	5.50	3.00	16.50	_____
LENTIL SEED	LB.	.27	65.00	17.55	_____
FIRE & HAIL INSUR.	ACRE	3.75	1.00	3.75	_____
CUSTOM AERIAL	ACRE	5.00	1.00	5.00	_____
DIMETHOATE	PT.	3.74	1.50	5.61	_____
TRUCK DRIVER	HOUR	6.50	.34	2.24	_____
COMBINE DRIVER	HOUR	12.00	.25	3.00	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	5.01	1.00	5.01	_____
TRACTOR FUEL/LUBE	ACRE	5.96	1.00	5.96	_____
MACHINERY REPAIRS	ACRE	12.95	1.00	12.95	_____
MACHINE FUEL/LUBE	ACRE	2.07	1.00	2.07	_____
LABOR (TRAC/MACH)	ACRE	12.62	1.00	12.62	_____
INTEREST ON OP. CAP.	DOL.	2.94	1.00	2.94	_____
OVERHEAD	DOL.	.05	110.23	5.51	_____

TOTAL VARIABLE COST				115.74	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	6.08	1.00	6.08	_____
TRACTOR INTEREST	ACRE	6.69	1.00	6.69	_____
TRACTOR INSURANCE	ACRE	.39	1.00	.39	_____
TRACTOR TAXES	ACRE	1.17	1.00	1.17	_____
TRACTOR HOUSING	ACRE	.65	1.00	.65	_____
MACHINE DEPRECIATION	ACRE	23.10	1.00	23.10	_____
MACHINE INTEREST	ACRE	17.48	1.00	17.48	_____
MACHINE INSURANCE	ACRE	1.02	1.00	1.02	_____
MACHINE TAXES	ACRE	3.07	1.00	3.07	_____
MACHINE HOUSING	ACRE	1.71	1.00	1.71	_____
LAND COST	ACRE	49.26	1.00	49.26	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				115.63	_____
TOTAL COST				231.37	_____

TABLE A16: SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE FOR SET-ASIDE (SUMMER FALLOW), EASTERN WHITMAN COUNTY, WASHINGTON

OPERATION	TOOLING	MTH YEAR	MACH HOURS	LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	MACH LABOR	SERVICE	MATER.	INTER.		
						\$	\$	\$	\$	\$	\$	\$
APPLY HERBICIDE	300HP-WT, SPRAY ROUNDUP	APR 1995	.02	.03	.41	.31	.30	1.50	5.15	.25	7.51	7.91
APPLY HERBICIDE	300HP-WT, SPRAY ROUNDUP	MAY 1995	.02	.03	.41	.31	.30	1.50	6.30	.22	8.63	9.04
RODWEED	300HP-WT, 36' CULTIWEEDER	AUG 1995	.07	.07	3.06	1.58	.73	.00	.00	.00	2.31	5.37
RODWEED	300HP-WT, 36' CULTIWEEDER	SEP 1995	.07	.07	3.06	1.58	.73	.00	.00	.22	2.53	5.59
WEED CONTROL	4WD ATV W/SPRAYER	ANN 1995	.02	.02	.15	.04	.23	.00	.50	.04	.81	.95
MACHINE TRANSPT	2 TON TRUCK	ANN 1995	.01	.01	.16	.13	.11	.00	.00	.01	.26	.42
MISC USE	4WD ATV	ANN 1995	.04	.05	.22	.07	.49	.00	.00	.03	.59	.81
MISC USE	52HP-WT W/BUCKET	ANN 1995	.15	.17	.96	.15	1.72	.00	.00	.10	1.97	2.93
MISC USE	3/4 TON PICKUP	ANN 1995	.25	.29	1.91	1.33	2.87	.00	.00	.22	4.42	6.33
TAXES	LAND TAXES	ANN 1995	.00	.00	5.00	.00	.00	.00	.00	.00	.00	5.00
OVERHEAD	UTILITIES, LEGAL, ACCT, ETC.	ANN 1995	.00	.00	.00	.00	.00	.00	1.45	.00	1.45	1.45
TOTAL PER ACRE			.65	.75	15.33	5.51	7.49	3.00	13.40	1.07	30.48	45.81

TABLE A17: MATERIALS AND SERVICES FOR SUMMER FALLOW

OPERATION	MONTH	MATERIAL AND/OR SERVICE
APPLY HERBICIDE	APRIL	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 12.0 OUNCES OF ROUNDUP-RT @ \$0.34/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
APPLY HERBICIDE	MAY	RENTAL OF 80' SPRAYER @ \$1.50/ACRE 12.0 OUNCES OF ROUNDUP-RT @ \$0.34/OUNCE 6.4 OUNCES OF SURFACTANT @ \$0.135/OUNCE
WEED CONTROL ¹	ANNUAL	NON-SELECTIVE HERBICIDE @ \$25.00/APPLIED ACRE
OVERHEAD	ANNUAL	5% OF VARIABLE COST

¹ 2% OF THE TOTAL ACREAGE IS ACTUALLY SPRAYED.

TABLE A18: ITEMIZED COST PER ACRE FOR SET-ASIDE (SUMMER FALLOW),
EASTERN WHITMAN COUNTY, WASHINGTON

		PRICE OR		VALUE OR	YOUR
		UNIT COST/UNIT	QUANTITY	COST	FARM

VARIABLE COSTS		\$		\$	
80' SPRAYER	ACRE	1.50	2.00	3.00	_____
ROUNDUP-RT	OZ.	.34	28.00	9.52	_____
SURFACTANT	OZ.	.14	12.80	1.72	_____
AMMON. SULFATE	LB.	.12	1.70	.20	_____
NON-SELECT HERB	ACRE	25.00	.02	.50	_____
TRACTOR REPAIR	ACRE	1.46	1.00	1.46	_____
TRACTOR FUEL/LUBE	ACRE	1.62	1.00	1.62	_____
MACHINERY REPAIRS	ACRE	2.36	1.00	2.36	_____
MACHINE FUEL/LUBE	ACRE	.06	1.00	.06	_____
LABOR (TRAC/MACH)	ACRE	7.49	1.00	7.49	_____
INTEREST ON OP. CAP.	DOL.	1.07	1.00	1.07	_____
OVERHEAD	DOL.	.05	29.02	1.45	_____

TOTAL VARIABLE COST				30.48	_____
FIXED COSTS		\$		\$	
TRACTOR DEPRECIATION	ACRE	1.88	1.00	1.88	_____
TRACTOR INTEREST	ACRE	2.16	1.00	2.16	_____
TRACTOR INSURANCE	ACRE	.13	1.00	.13	_____
TRACTOR TAXES	ACRE	.38	1.00	.38	_____
TRACTOR HOUSING	ACRE	.21	1.00	.21	_____
MACHINE DEPRECIATION	ACRE	2.69	1.00	2.69	_____
MACHINE INTEREST	ACRE	2.16	1.00	2.16	_____
MACHINE INSURANCE	ACRE	.13	1.00	.13	_____
MACHINE TAXES	ACRE	.38	1.00	.38	_____
MACHINE HOUSING	ACRE	.21	1.00	.21	_____
LAND TAX	ACRE	5.00	1.00	5.00	_____

TOTAL FIXED COST				15.33	_____
TOTAL COST				45.81	_____

TABLE A19: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A WINTER WHEAT-SPRING BARLEY-DRY PEA ROTATION OVER A 3-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	\$		\$
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
SPRING BARLEY	88.68	1.75 TONS	155.19
DRY PEAS	8.94	20 CWT.	<u>178.80</u>
TOTAL RECEIPTS			622.74
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
SPRING BARLEY			125.34
DRY PEAS			147.70
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
SPRING BARLEY			50.79
DRY PEAS			51.18
LAND COST FOR:			
WINTER WHEAT			76.08
SPRING BARLEY			36.13
DRY PEAS			39.07
LAND TAXES (3 YEARS)			<u>15.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 3-YEAR PERIOD			
			-83.96

TABLE A20: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A WINTER WHEAT-SPRING BARLEY-SPRING LENTIL ROTATION OVER A 3-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	\$		\$
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
SPRING BARLEY	88.68	1.75 TONS	155.19
SPRING LENTILS	18.40	12 CWT.	<u>220.80</u>
TOTAL RECEIPTS			664.74
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
SPRING BARLEY			125.34
SPRING LENTILS			115.74
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
SPRING BARLEY			50.79
SPRING LENTILS			61.37
LAND COST FOR:			
WINTER WHEAT			76.08
SPRING BARLEY			36.13
SPRING LENTILS			49.26
LAND TAXES (3 YEARS)			<u>15.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 3-YEAR PERIOD			<u>-30.38</u>

TABLE A21: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A
WINTER WHEAT-SPRING WHEAT-DRY PEA ROTATION OVER A 3-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	\$		\$
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
SPRING WHEAT	3.85	50 BU.	192.50
DRY PEAS	8.94	20 CWT.	<u>178.80</u>
TOTAL RECEIPTS			660.05
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
SPRING BARLEY			137.56
DRY PEAS			147.70
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
SPRING BARLEY			51.62
DRY PEAS			51.18
LAND COST FOR:			
WINTER WHEAT			76.08
SPRING BARLEY			48.57
DRY PEAS			39.07
LAND TAXES (3 YEARS)			<u>15.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 3-YEAR PERIOD			<u>-72.14</u>

TABLE A22: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A
WINTER WHEAT-SPRING BARLEY-SPRING LENTIL ROTATION OVER A 3-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	\$		\$
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
SPRING WHEAT	3.85	50 BU.	192.50
SPRING LENTILS	18.40	12 CWT.	<u>220.80</u>
TOTAL RECEIPTS			702.05
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
SPRING BARLEY			137.56
SPRING LENTILS			115.74
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
SPRING BARLEY			51.62
SPRING LENTILS			61.37
LAND COST FOR:			
WINTER WHEAT			76.08
SPRING BARLEY			48.57
SPRING LENTILS			49.26
LAND TAXES (3 YEARS)			<u>15.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 3-YEAR PERIOD			<u>-18.56</u>

TABLE A23: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A WINTER WHEAT-DRY PEA ROTATION OVER A 2-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	§		§
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
DRY PEAS	8.94	20 CWT.	<u>178.80</u>
TOTAL RECEIPTS			467.55
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
DRY PEAS			147.70
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
DRY PEAS			51.18
LAND COST FOR:			
WINTER WHEAT			76.08
DRY PEAS			39.07
LAND TAXES (2 YEARS)			<u>10.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 2-YEAR PERIOD			<u>-21.89</u>

TABLE A24: SUMMARY OF RECEIPTS, COSTS AND PROFITABILITY PER ACRE FOR A
WINTER WHEAT-SPRING LENTIL ROTATION OVER A 2-YEAR PERIOD

	PRICE/UNIT		VALUE OR COST
	\$		\$
1. GROSS RECEIPTS FROM PRODUCTION			
WINTER WHEAT	3.85	75 BU.	288.75
SPRING LENTILS	18.40	12 CWT.	<u>220.80</u>
TOTAL RECEIPTS			509.55
LESS:			
VARIABLE COST FOR:			
WINTER WHEAT			125.23
SPRING LENTILS			115.74
TRACTOR & MACHINERY FIXED COSTS FOR:			
WINTER WHEAT			40.18
SPRING LENTILS			61.37
LAND COST FOR:			
WINTER WHEAT			76.08
SPRING LENTILS			49.26
LAND TAXES (2 YEARS)			<u>10.00</u>
2. NET RETURNS TO MANAGEMENT OVER A 2-YEAR PERIOD			
			<u>31.69</u>

TABLE A25: HOURLY MACHINERY COSTS

MACHINERY	PURCHASE PRICE	YEARS TO TRADE	ANNUAL HOURS	DEPRECIATION	INTEREST	INSURANCE	TAXES	HOUSING	TOTAL FIXED COST	REPAIR	FUEL AND LUBE	TOTAL VARIABLE COST	TOTAL COST
	\$								COST PER HOUR				
300HP-WT	75,000.00	15	500	8.13	9.12	.53	1.60	.89	20.28	7.00	8.63	15.63	35.91
200HP-CT	60,000.00	15	350	10.34	9.62	.56	1.69	.94	23.15	6.57	6.04	12.61	35.76
DBL DISC DRILL	30,000.00	12	85	25.32	20.60	1.21	3.62	2.01	52.76	11.76	.00	11.76	64.52
22' HILL COMBINE	140,000.00	10	270	47.41	28.85	1.69	5.07	2.81	85.83	18.52	5.18	23.69	109.52
TANDEM AXLE TRUCK	30,000.00	10	200	10.57	9.96	.58	1.75	.97	23.83	15.00	6.47	21.47	45.30
2 TON TRUCK	18,000.00	15	150	7.24	6.73	.39	1.18	.66	16.21	6.67	6.47	13.14	29.34
36' CULTIWEEDER	18,000.00	10	125	11.85	8.69	.51	1.53	.85	23.42	6.40	.00	6.40	29.82
MOLDBOARD PLOW	16,000.00	20	125	6.40	6.56	.38	1.15	.64	15.14	4.80	.00	4.80	19.94
36' CULTIVATOR	15,000.00	15	125	7.23	6.74	.39	1.18	.66	16.21	4.00	.00	4.00	20.21
60' FLEX HARROW	8,500.00	20	50	8.50	8.71	.51	1.53	.85	20.10	9.00	.00	9.00	29.10
40' PACKER	15,000.00	20	100	7.50	7.69	.45	1.35	.75	17.74	3.00	.00	3.00	20.74
3/4 TON 4WD PICKUP	18,000.00	10	375	3.38	3.19	.19	.56	.31	7.63	5.33	.00	5.33	12.96
14' SWATHER	25,000.00	20	100	12.50	12.81	.75	2.25	1.25	29.56	10.00	.00	10.00	39.56
4WD ATV	4,000.00	10	125	2.56	1.97	.12	.35	.19	5.18	1.60	.00	1.60	6.78
52HP-WT	16,000.00	20	300	2.40	3.01	.18	.53	.29	6.40	1.00	.00	1.00	7.40
ATV SPRAYER	500.00	10	40	1.25	.64	.04	.11	.06	2.10	.25	.00	.25	2.35

TABLE A26: PRICES OF INPUTS

	UNIT	PRICE
		\$
SERVICES:		
FIRE AND HAIL INSURANCE		
WINTER WHEAT	ACRE	3.48
SPRING BARLEY	ACRE	2.13
SOFT WHITE SPRING WHEAT	ACRE	2.18
DRY PEAS	ACRE	2.50
LENTILS	ACRE	3.75
AERIAL APPLICATION	ACRE	5.00
RENTAL OF 80' SPRAYER	ACRE	1.50
MATERIALS:		
GASOLINE	GALLON	1.20
DIESEL	GALLON	0.80
NITROGEN (A.I.)	POUND	0.31
SULFUR (A.I.)	POUND	0.35
PHOSPHATE	POUND	0.45
AMMONIUM SULFATE	POUND	0.12
ROUNDUP-RT	OUNCE	0.34
SURFACTANT	OUNCE	0.135
FINESSE	OUNCE	18.90
BUCTRIL	OUNCE	0.50
MCPA ESTER	PINT	2.25
HARMONY-XTRA	OUNCE	14.20
SUR-FIRE	PINT	4.50
FARGO	QUART	10.43
PURSUIT	OUNCE	5.50
IMIDAN	POUND	3.84
DIMETHOATE	PINT	3.74
WHEAT SEED	POUND	0.14
BARLEY SEED	POUND	0.135
PEA SEED	POUND	0.20
LENTIL SEED	POUND	0.27
OTHER:		
LAND TAXES	ACRE	5.00
MACHINE OPERATOR LABOR	HOUR	10.00
TRUCK DRIVER LABOR	HOUR	6.50
COMBINE DRIVER LABOR	HOUR	12.00